CSGW User Manual

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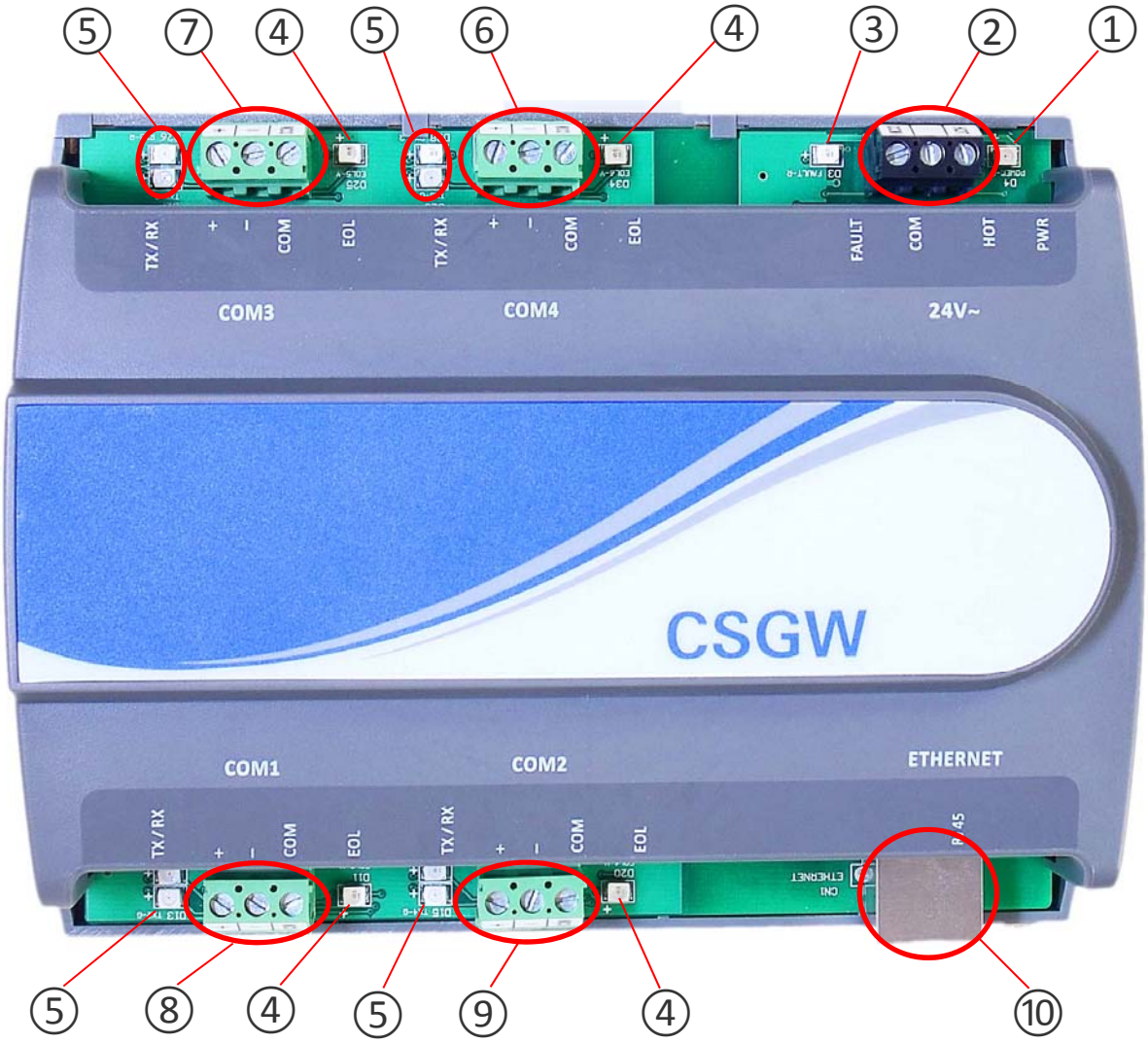
Wire CSGW

1. Connect the **24 VAC** supply power wires from the transformer to the 3-terminal rising clamp terminal block as shown in the figure below.
2. Connect the CAT5 cable between the RJ-45 jack on the CSGW and the network switch or hub. You cannot directly connect CSGW to a PC unless using a “crossover” cable.



NO.	Description
①	Power LED, always on (green) if power is applied.
②	24VAC, 3-terminal rising clamp terminal block.
③	FAULT LED, red to indicate fault status
④	EOL (End Of Line) indicator, yellow when the switch is ON.
⑤	Communication LED. TX, in green, for sending message; RX, in red, for receiving message.
⑥	COM4 is RS485 port, only available for CSGW-4.
⑦	COM3 is RS485 port, available for CSGW-3 and CSGW-4.

⑧	COM1 is RS485 port, can work as MS/TP on CSGW-1/CSGW-2/CSGW-3, or can be connected to RS485 bus on CSGW-4.
⑨	COM 2 is RS485 port, available for CSGW-2/CSGW-3/CSGW-4.
⑩	RJ45 Ethernet Port.

NOTE:

<1> If the yellow Link LED is not on, check the cable to make sure it is connected properly. It should be on any time power is applied and an Ethernet connection is present.

<2> CSGW takes about 45 seconds to boot up after power is applied. The Fault LED should be on and web access won't be available until it is completely started.

<3> There are RESTORE and RESET buttons within the housing. To restore factory default settings, remove the upper cover, press the RESTORE button and hold for more than 5 seconds, and then press the RESET button.

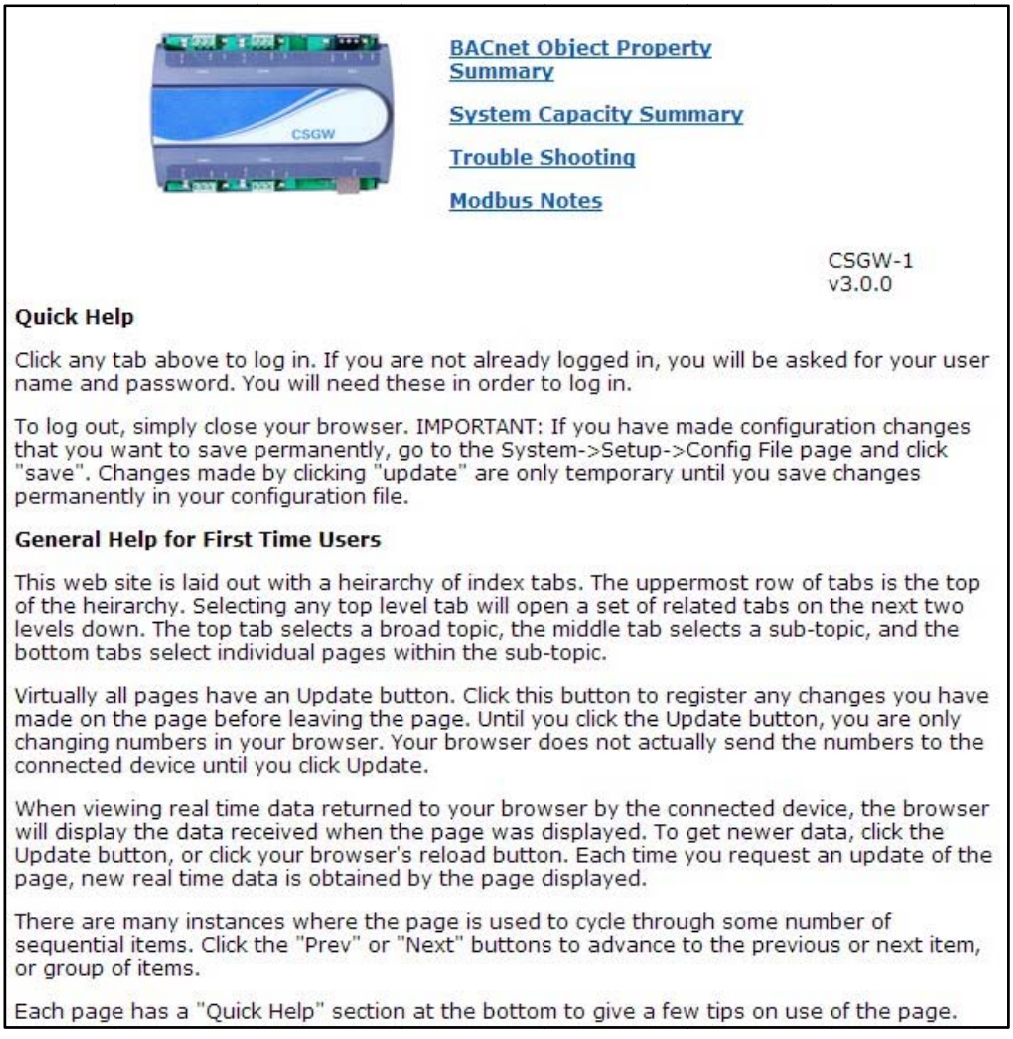
<4> To restart CSGW, you can re-applied power to the device or press the RESET button.

Access to CSGW via Web Browser

1. Launch the browser (preferably IE8 or Google Chrome), and enter "http://192.168.0.123/" as URL in the address bar. Authentication is required before you can access the device.

Windows Security
The server 192.168.0.123 at Web Server Authentication requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
system
Remember my credentials
OK
Cancel

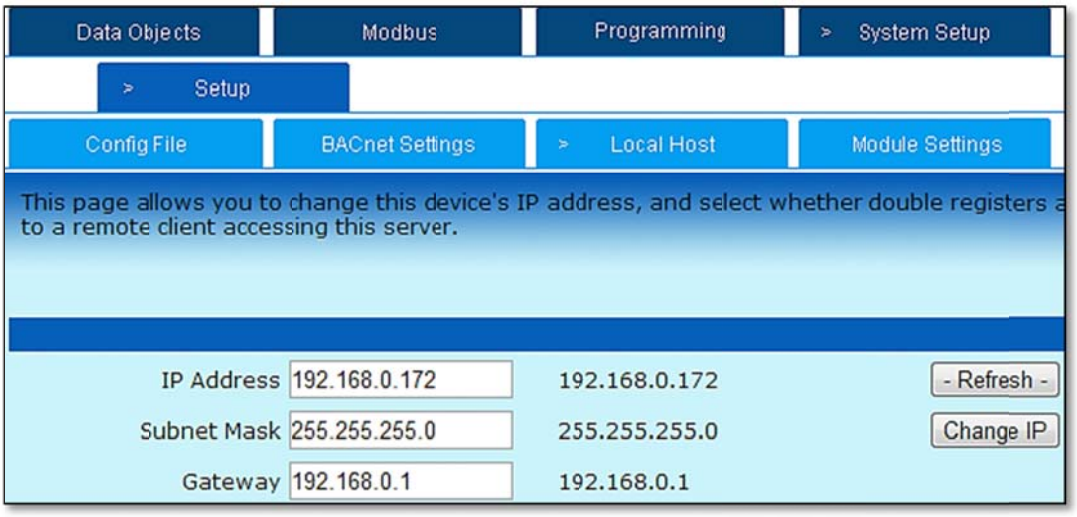
2. Type in "**system**" as user name and "**root**" as password to login the device.
3. After login, you will see the following page:


BACnet Object Property Summary
System Capacity Summary
Trouble Shooting
Modbus Notes
CSGW-1
v3.0.0
Quick Help
Click any tab above to log in. If you are not already logged in, you will be asked for your user name and password. You will need these in order to log in.
To log out, simply close your browser. IMPORTANT: If you have made configuration changes that you want to save permanently, go to the System->Setup->Config File page and click "save". Changes made by clicking "update" are only temporary until you save changes permanently in your configuration file.
General Help for First Time Users
This web site is laid out with a heirarchy of index tabs. The uppermost row of tabs is the top of the heirarchy. Selecting any top level tab will open a set of related tabs on the next two levels down. The top tab selects a broad topic, the middle tab selects a sub-topic, and the bottom tabs select individual pages within the sub-topic.
Virtually all pages have an Update button. Click this button to register any changes you have made on the page before leaving the page. Until you click the Update button, you are only changing numbers in your browser. Your browser does not actually send the numbers to the connected device until you click Update.
When viewing real time data returned to your browser by the connected device, the browser will display the data received when the page was displayed. To get newer data, click the Update button, or click your browser's reload button. Each time you request an update of the page, new real time data is obtained by the page displayed.
There are many instances where the page is used to cycle through some number of sequential items. Click the "Prev" or "Next" buttons to advance to the previous or next item, or group of items.
Each page has a "Quick Help" section at the bottom to give a few tips on use of the page.

4. For each page, a Quick Help section is provided explaining functionalities.

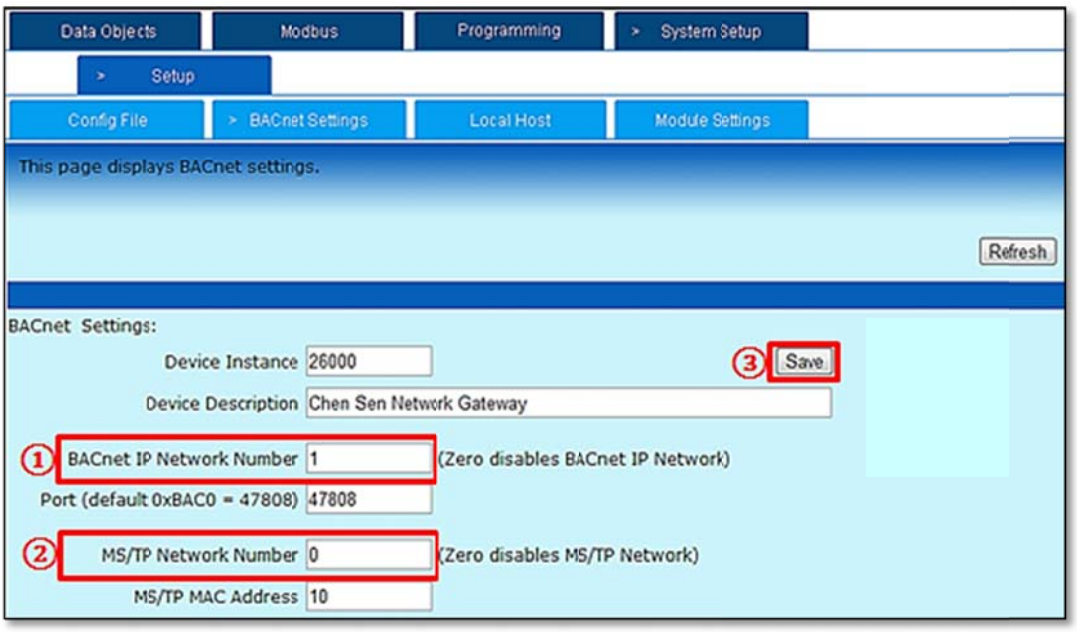
System Setup

1. Change IP address: System Setup> Setup> Local Host



To change the IP address of the device, enter new IP address, subnet mask, and gateway address, then click "change IP". CSGW can also acquire an IP address from DHCP server by leaving the IP address empty. IP address change will take effect upon next power cycle.

2. Setup BACnet Parameters: System Setup> Setup> BACnet Settings



To enable BACnet IP network, specify the parameters as follows:

① BACnet IP Network Number = 1 (Enables BACnet IP Network).

② MS/TP Network Number = 0 (Disables MS/TP Network).

③ Click the save button.

To enable BACnet MS/TP[1] network, specify the parameters as follows:

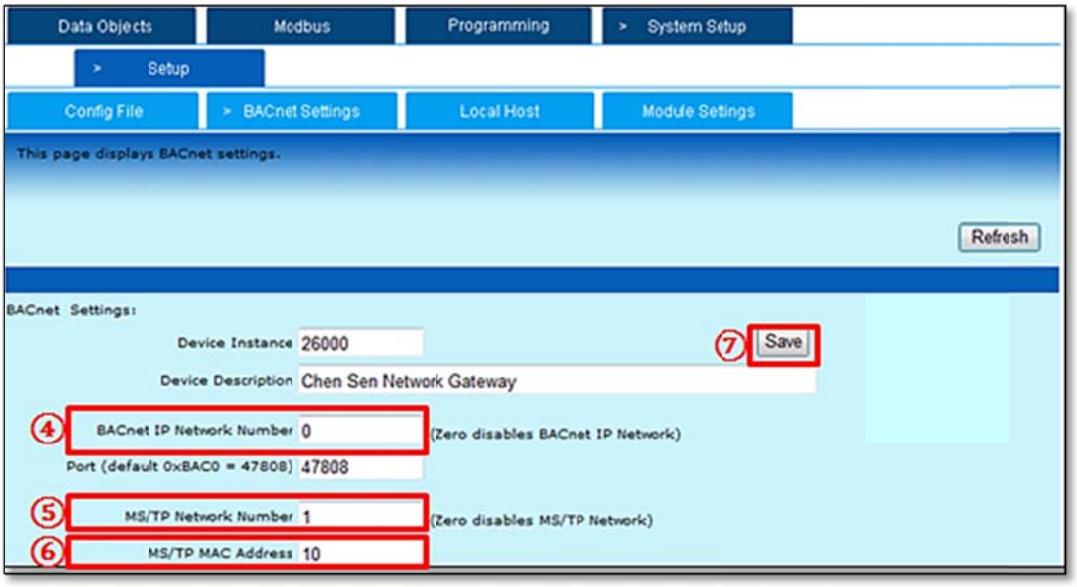
④ BACnet IP Network Number = 0 (Disables BACnet IP Network).

[1] Settings about MS/TP does not apply to CSGW-4.

⑤ MS/TP Network Number = 1 (Enables MS/TP Network).

⑥ Specify a MS/TP MAC Address to CSGW and make sure it is unique on the MS/TP trunk.

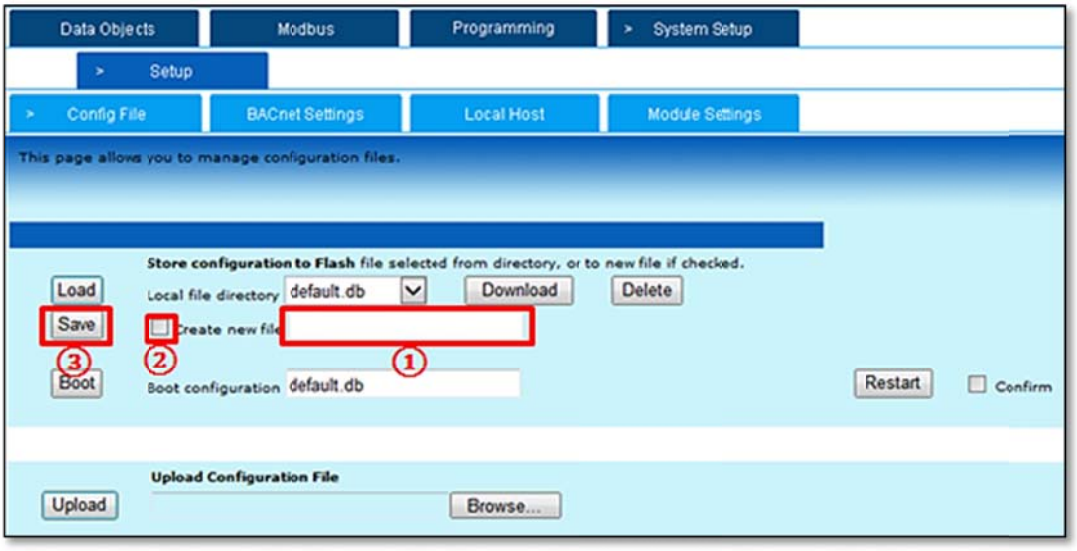
⑦ Click the save button.



If there're more than one CSGWs connected on the BACnet network, make sure every CSGW has a unique Device Instance.

Click the save button to save changes before leaving the page.

3. Save Configuration File: System Setup> Setup> Config File



Be sure to save any changes you made using the save button.

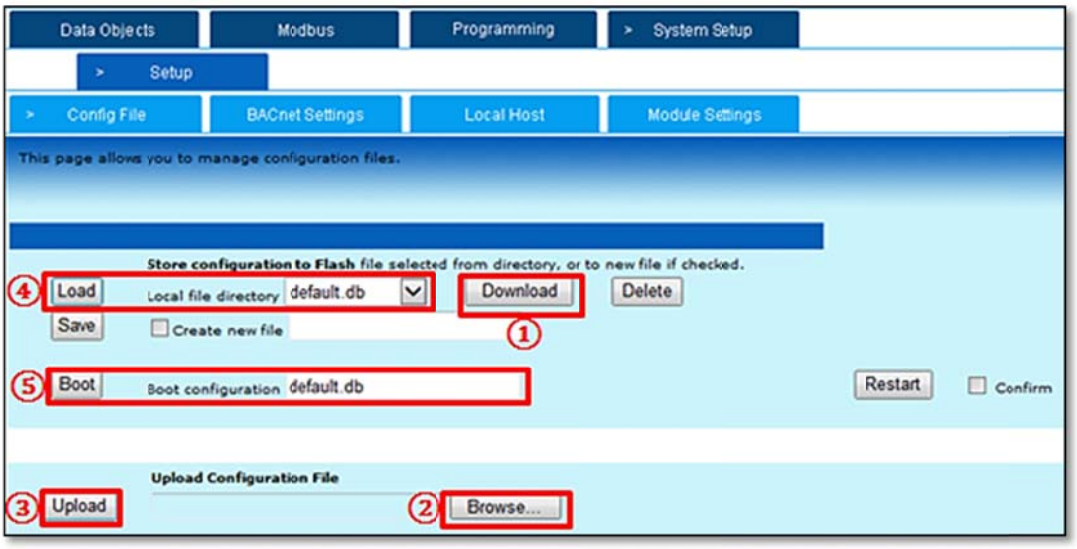
You can also save the current configuration to a new file:

① Type new file name in the input box following the "Create new file" check box. It is suggested to only contain alphanumeric characters (e.g.: test123.db) in the file name.

② Check "Create new file".

③ Click the save button.

4. Upload and Download Configuration File: System Setup> Setup> Config File



To back up the current configuration, do the followings:

① Click the download button, and then choose a directory to save the configuration file.

To upload a new configuration file[2], do the followings:

② Click the browse button, browse and select the configuration file.

③ Click the upload button. A page (shown as figure below) will show up to indicate the upload result.

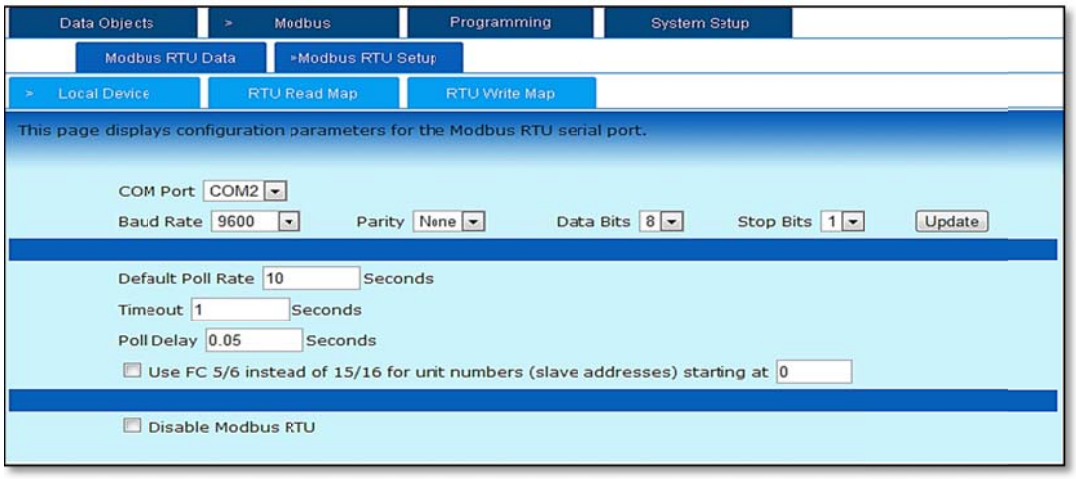
④ Click on the drop-down list of “Local file directory” to select the configuration file you just uploaded, and load it.

⑤ Click on the boot button to make it as the default configuration, which will be loaded as the device starts up.

[2] Configuration files can be downloaded or created by CSGWTool. For more information of CSGWTool, please refer to CSGW Tool User Manual.

Modbus RTU Setup

1. Setup Modbus RTU Local Device parameters: Modbus> Modbus RTU Setup> Local Device



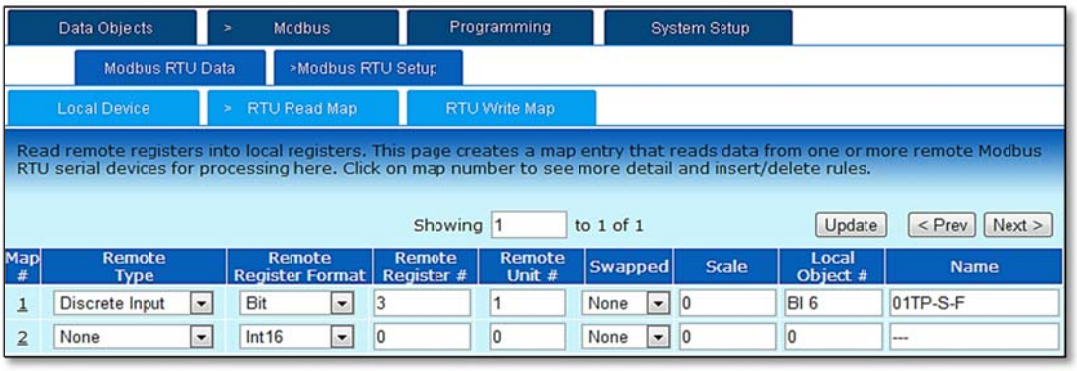
For CSGW-1, only COM2 can be specified from the COM Port drop down list.

For CSGW-2/CSGW-3/CSGW-4, please select a COM Port to configure its parameters. RTU Data and Setup pages only show objects associated with the current selected COM port.

Baud Rate, Parity, Data Bits and Stop Bits should be the same as the Modbus slave connected to the bus. Default Poll Rate and Poll Delay can be fine-tuned according to specific application in the field. The default settings are: 10 seconds for Poll Rate, 1 second for Timeout, and 0.05 seconds for Poll Delay. For Modbus devices that can only support function code 05/06 when written, please check the box of "Use FC 5/6 …" and specify the starting unit number.

Click on the update button to save your settings.

2. To create mappings for discrete input registers (1X references, e.g.: BI6, 10003 of slave 1): Modbus> Modbus RTU Setup> RTU Read Map


Data Objects
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RTU Write Map
Read remote registers into local registers. This page creates a map entry that reads data from one or more remote Modbus RTU serial devices for processing here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 1 of 1
Update
< Prev
Next >
Map # | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Scale | Local Object # | Name
1 | Discrete Input | Bit | 3 | 1 | None | 0 | BI 6 | 01TP-S-F
2 | None | Int16 | 0 | 0 | None | 0 | 0 | ---

Specify Discrete Input for Remote Type, Bit from Remote Register Format, 1 for Remote Register #[3] (Modbus Register 10003), 1 for Remote Unit# (Modbus slave address), BI 6 for Local Object# (Local BACnet Object), and 01TP-S-F for Name[4] (BACnet object name).

[3] Register number starts from 1, equals to register address (which starts from 0) adding 1. E.g.: 10003, register number 3 represents register address 2.

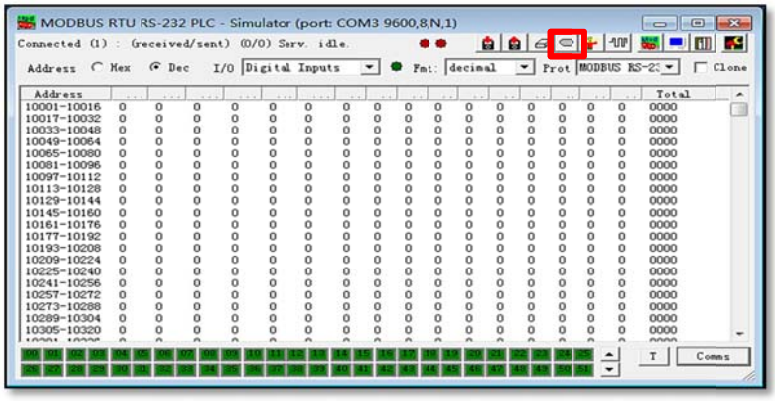
[4] Name should be short (less than 14 characters), plain and simple. Suggested characters are alphanumeric, dash, dot, and space, otherwise it might not be correctly shown in MSEA.

Click the update button to save changes.

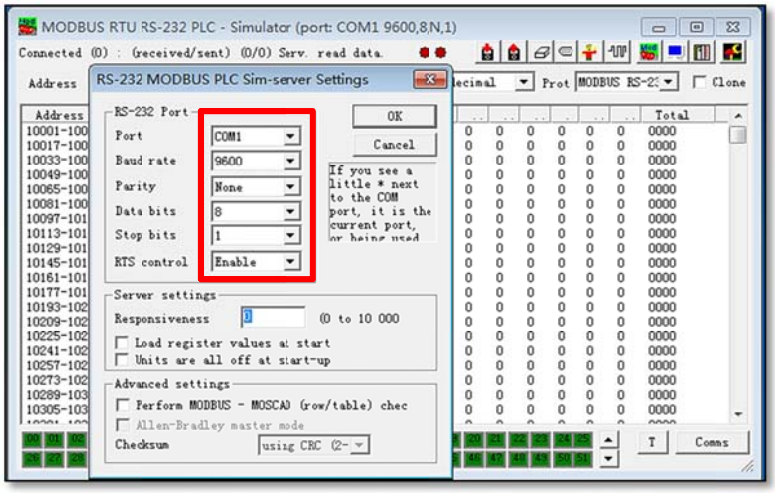
To check whether the newly created mapping works, do the followings:

① Connect CSGW to PC using a “Serial to USB” cable with RS485 convertor, find out the correct COM port for the cable on PC.

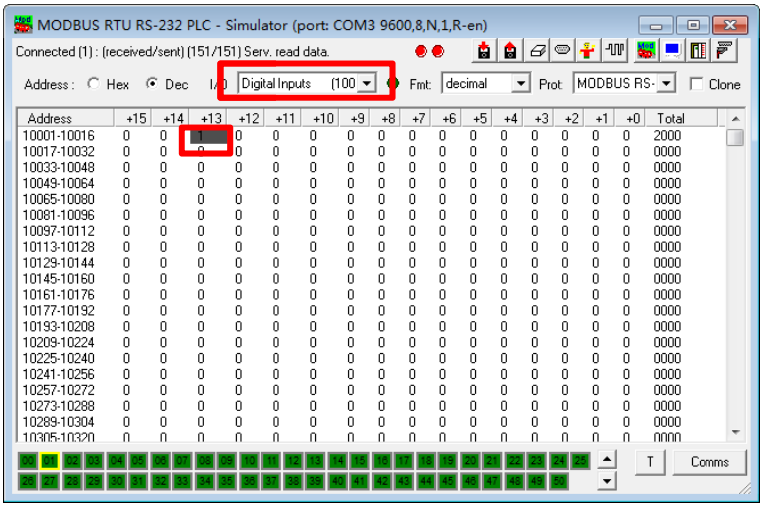
② Run a Modbus slave simulator (e.g.: mod_RSsim.exe).



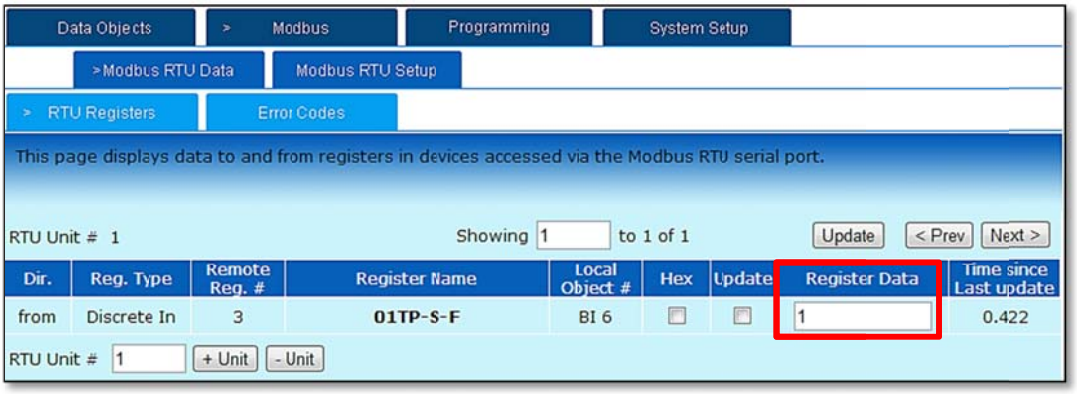
③ Select and Setup the serial port parameters accordingly.



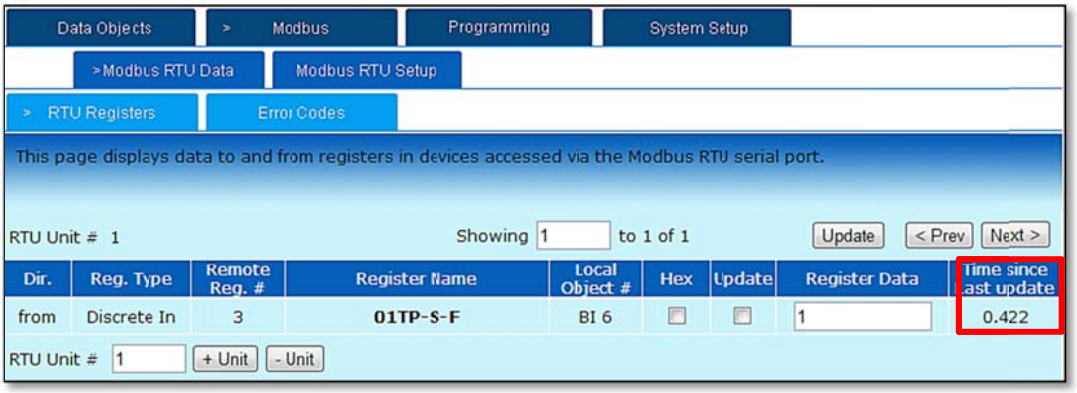
④ Select Digital Inputs from the I/O dropdown list, and set 10003 to 1.



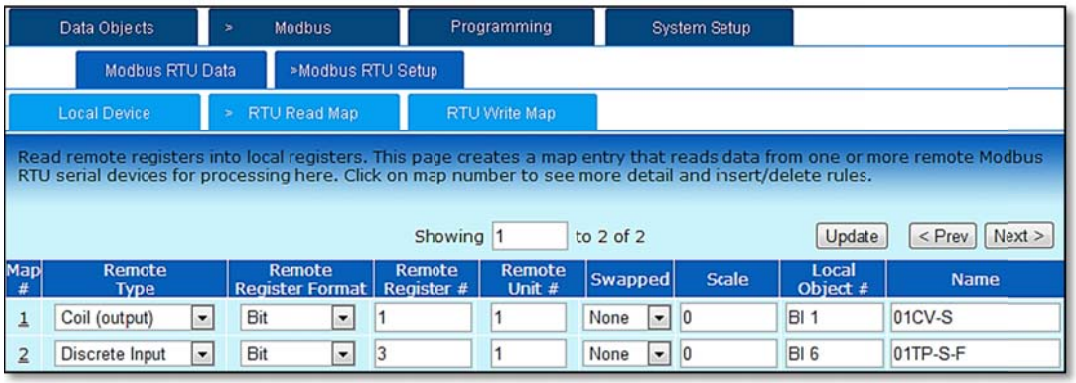
⑤ On CSGW, Modbus> Modbus RTU Data> RTU Registers, Register Data of BI 6 should be 1.



⑥ Click the update button, Time since Last update will change periodically.



3. To create mappings for coil registers[5] (0X references, e.g.: BI1, 00001 of slave 1):
   Modbus> Modbus RTU Setup> RTU Read Map

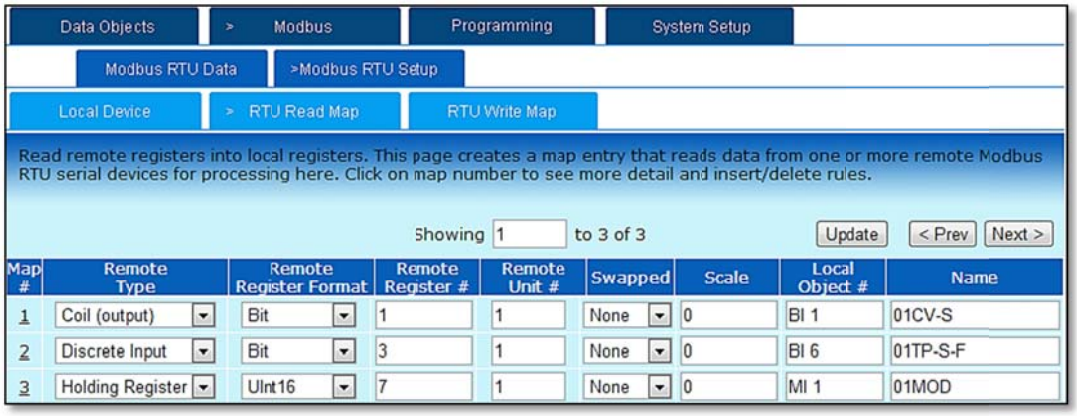


   Specify Coil (output) for Remote Type, Bit for Remote Register Format, 1 for Remote Register# (register: 00001), 1 for Remote Unit# (slave: 1), BI 1 for Local Object, 01CV-S for Name. Click the update button to save changes.

   To check whether the newly created mapping works, please refer to Part 2.

4. To create mappings for holding registers (4X references, e.g.: MI1, 40007 of slave 1, UInt16[6]):
   Modbus> Modbus RTU Setup> RTU Read Map

[5] Coil registers support not only read but also written, as well as holding registers.
[6] UInt16 (16-bit unsigned integer) is one of the data formats. For more information about the data formats, please refer to Part 10.


Data Objects
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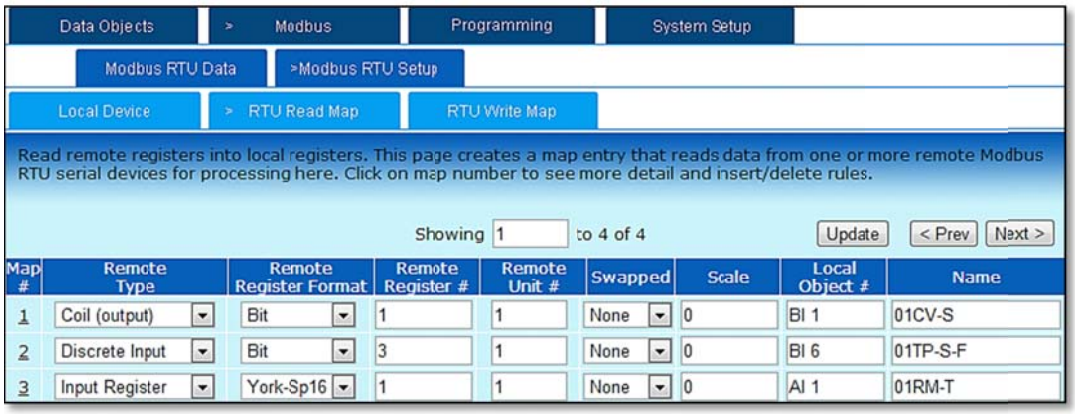
RTU Write Map
Read remote registers into local registers. This page creates a map entry that reads data from one or more remote Modbus RTU serial devices for processing here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 3 of 3
Update
< Prev
Next >
Map # | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Scale | Local Object # | Name
1 | Coil (output) | Bit | 1 | 1 | None | 0 | BI 1 | 01CV-S
2 | Discrete Input | Bit | 3 | 1 | None | 0 | BI 6 | 01TP-S-F
3 | Holding Register | UInt16 | 7 | 1 | None | 0 | MI 1 | 01MOD

Specify Holding Register for Remote Type, UInt16 for Remote Register Format, 7 for Remote Register# (register: 40007), 1 for Remote Unit# (slave: 1), MI 1 for Local Object, 01MOD for Name. Click the update button to save changes.

To check if the newly created mapping works, please refer to Part 2.

5. To create mappings for input registers (3X references, e.g.: AI1, 30001 of slave 1, York-Sp16):

   Modbus> Modbus RTU Setup> RTU Read Map

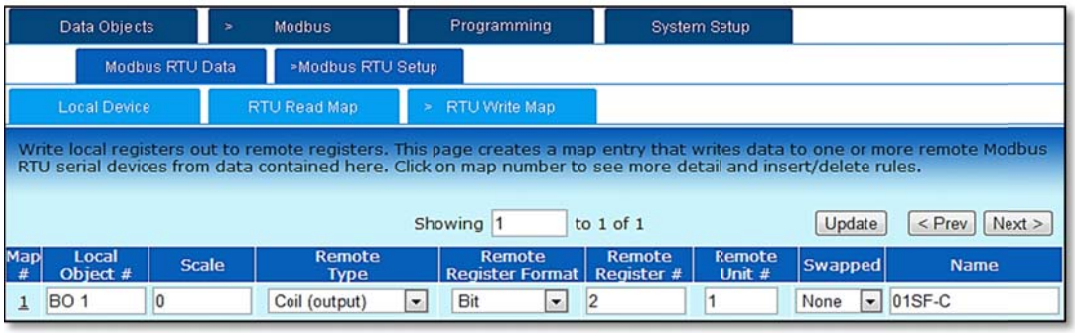

Data Objects
Modbus
Programming
System Setup
Modbus RTU Data
Modbus RTU Setup
Local Device
RTU Read Map
RTU Write Map
Read remote registers into local registers. This page creates a map entry that reads data from one or more remote Modbus RTU serial devices for processing here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 4 of 4
Update
< Prev
Next >
Map # | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Scale | Local Object # | Name
1 | Coil (output) | Bit | 1 | 1 | None | 0 | BI 1 | 01CV-S
2 | Discrete Input | Bit | 3 | 1 | None | 0 | BI 6 | 01TP-S-F
3 | Input Register | York-Sp16 | 1 | 1 | None | 0 | AI 1 | 01RM-T

Specify Input Register for Remote Type, York-Sp16 for Remote Register Format, 1 for Remote Register# (register: 30001), 1 for Remote Unit# (slave: 1), AI 1 for Local Object, 01RM-T for Name. Click the update button to save changes.

To check if the newly created mapping works, please refer to Part 2.

6. To write values to Coil Registers (BO, e.g.: BO1, 00002 of slave 1):

   Modbus> Modbus RTU Setup> RTU Write Map


Data Objects
Modbus
Programming
System Setup
Modbus RTU Data
Modbus RTU Setup
Local Device
RTU Read Map
RTU Write Map
Write local registers out to remote registers. This page creates a map entry that writes data to one or more remote Modbus RTU serial devices from data contained here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 1 of 1
Update
< Prev
Next >
Map # | Local Object # | Scale | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Name
1 | BO 1 | 0 | Coil (output) | Bit | 2 | 1 | None | 01SF-C

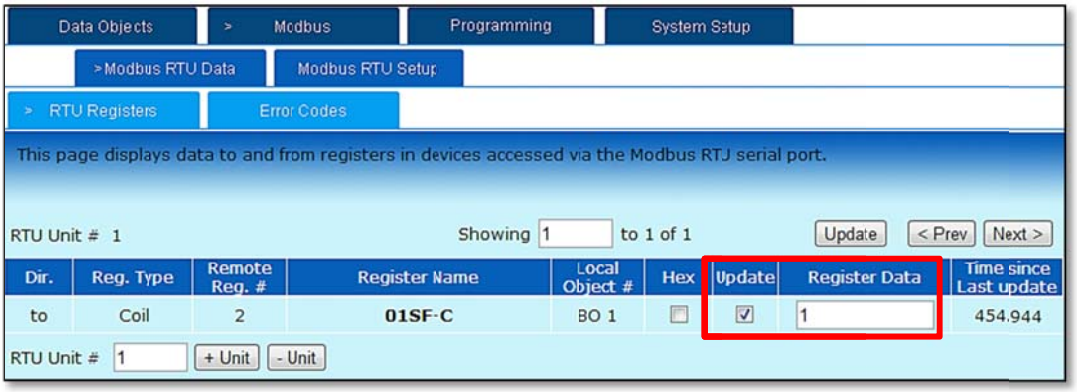
Specify BO 1 for Local Object, Coil (output) for Remote Type, Bit for Remote Register Format, 2 for Remote Register# (register: 00002), 1 for Remote Unit# (slave: 1), 01SF-C for Name. Click the update button to save changes.

To check the newly created mapping works, do the followings:

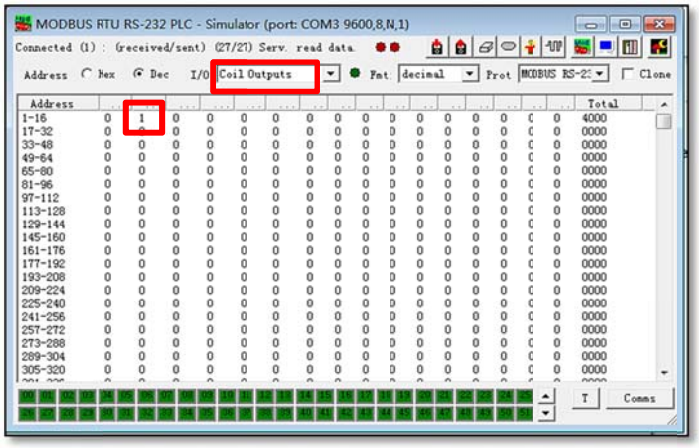
① Refer to Part 2, connect "Serial to USB" cable with RS485 convertor, and setup the serial port parameters accordingly in the Modbus simulator (e.g.: ModSim.exe).

② Select Coil Outputs from the I/O dropdown list.

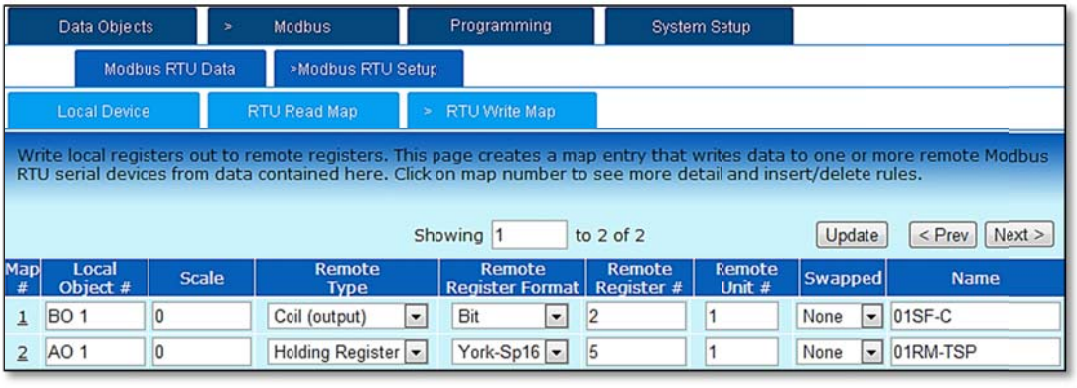
③ Modbus> Modbus RTU Data> RTU Registers, enter 1 in Register Data of BO 1, check the update checkbox, click the update button.



④ On the Modsim.exe Window, value of Coil 2 should be 1.



7. To write preset value to Holding Registers (AO, e.g.: 40005 of slave 1, York-Sp16):
   Modbus> Modbus RTU Setup> RTU Write Map

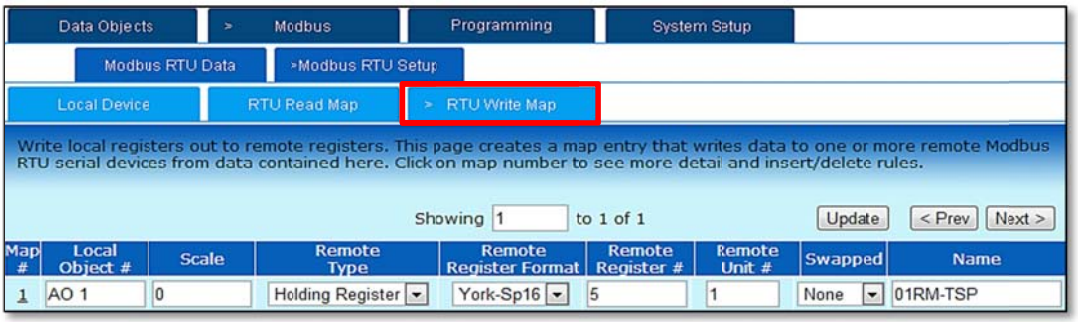


Specify AO 1 for Local Object, Holding Register for Remote Type, York-Sp16 for Remote Register Format, 5 for Remote Register# (register: 40005), 1 for Remote Unit# (slave: 1), 01RM-TSP for Name. Click the update button to save changes.

To check if the newly created mapping works, please refer to Part 6.

8. To create read-write Object (e.g.: Holding Register, AO 1, 40005 of slave 1, York-Sp16):

   Create two mappings for the object (AO and BO suggested) with the same parameters, one in the "RTU Read Map" page, the other in the "RTU Write Map" page.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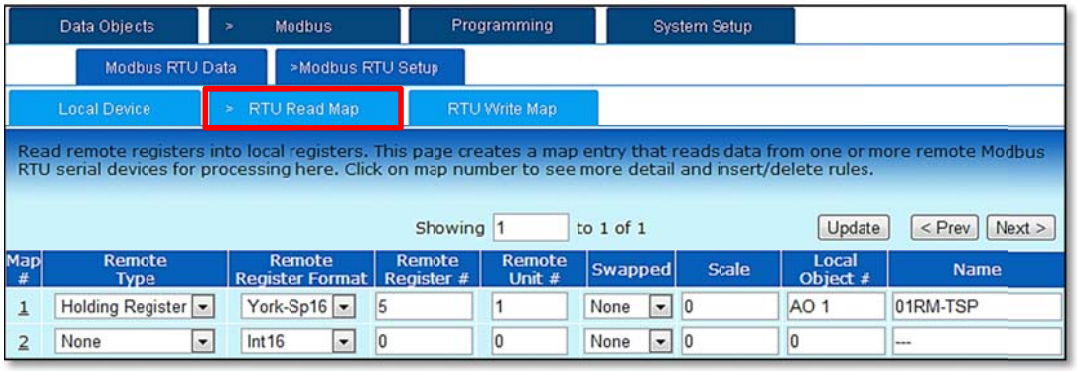
Local Device
RTU Read Map
RTU Write Map
Write local registers out to remote registers. This page creates a map entry that writes data to one or more remote Modbus RTU serial devices from data contained here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 1 of 1
Update
< Prev
Next >
Map # | Local Object # | Scale | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Name
1 | AO 1 | 0 | Holding Register | York-Sp16 | 5 | 1 | None | 01RM-TSP


Data Objects
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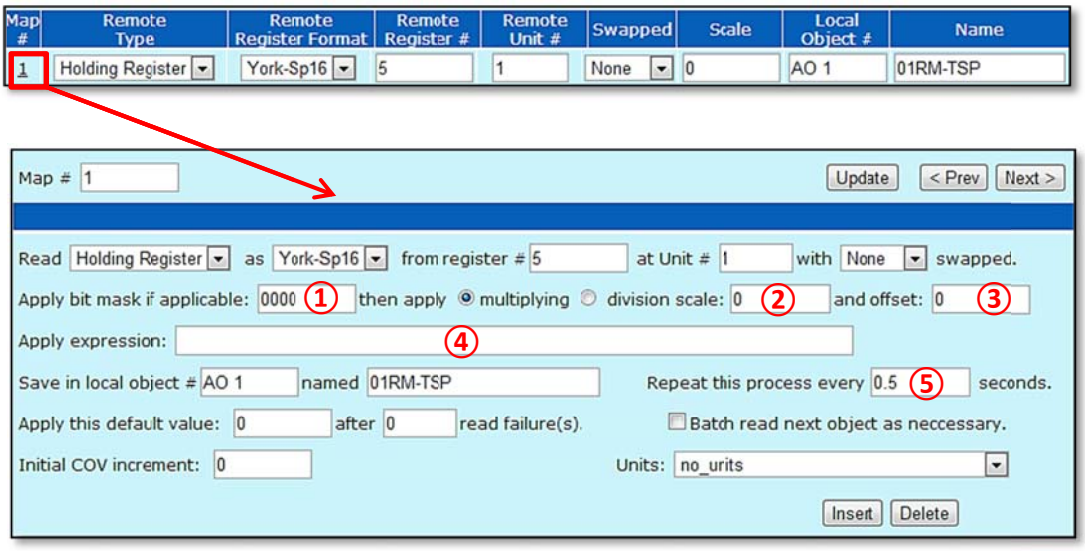
RTU Write Map
Read remote registers into local registers. This page creates a map entry that reads data from one or more remote Modbus RTU serial devices for processing here. Click on map number to see more detail and insert/delete rules.
Showing 1 to 1 of 1
Update
< Prev
Next >
Map # | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Scale | Local Object # | Name
1 | Holding Register | York-Sp16 | 5 | 1 | None | 0 | AO 1 | 01RM-TSP
2 | None | Int16 | 0 | 0 | None | 0 | 0 | ---

NOTE:

A read-write object can read from a remote Modbus register to update the local BACnet object and write the present value of the local BACnet object whenever it is changed by other BACnet devices.

9. Detailed mapping configuration:


Map # | Remote Type | Remote Register Format | Remote Register # | Remote Unit # | Swapped | Scale | Local Object # | Name
1 | Holding Register | York-Sp16 | 5 | 1 | None | 0 | AO 1 | 01RM-TSP
Map # 1
Update
< Prev
Next >
Read Holding Register as York-Sp16 from register # 5 at Unit # 1 with None swapped.
Apply bit mask if applicable: 0000 ① then apply multiplying division scale: 0 ② and offset: 0 ③
Apply expression: ④
Save in local object # AO 1 named 01RM-TSP Repeat this process every 0.5 ⑤ seconds.
Apply this default value: 0 after 0 read failure(s). Batch read next object as neccessary.
Initial COV increment: 0 Units: no_urits
Insert
Delete

① Bit mask：4 hexadecimal digits. Usually it's used to remove undesired bits from data.

e.g.: AI3 is mapped to Modbus register 30002 and only the lower byte is needed. Bit mask is set to 00FF. Register value A1B2H will be evaluated to 178 (i.e. B2H).

AI4 is mapped to Modbus register 30002 and only the higher byte is needed. Bit mask is set to FF00 and scale is set to division 256 (i.e. right shift by 8 bits). Register value A1B2H will be evaluated to 161 (i.e. A1H).

BI2 is mapped to Modbus register 40003 and only bit 0 is needed. Bit mask is set to 0001. Register value 8001H will be evaluated to 1.

BI3 is mapped to Modbus register 40003 and only bit 5 is needed. Bit mask is set to 0020. Register value 8001H will be evaluated to 0.

BI4 is mapped to Modbus register 40003 and only bit 15 is needed. Bit mask is set to 8000. Register value 8001H will be evaluated to 1.

NOTE:

For non-binary objects, bit mask is often used together with scale to get the proper value.

For binary objects, please select Int16 or UInt16 as data format if you specify a bit mask.

② Scale: if the scale value is not zero, register value will be multiplied by it (if the multiplying radio box is selected), or divided by it (if the division radio box is selected). Default is multiplying.

e.g.: AI5 is mapped to Modbus register 30003 and one-tenth of the register value is desired. The scale value is set to multiplying and 0.1. Register value 00C8H will be evaluated to 20.

③ Offset: if set, it will be added to the register value.

e.g.: AI6 is mapped to Modbus register 30003. Offset is set to -0.5, and then register value 000AH will be evaluated to 9.5 (i.e. 10-0.5).

④ Free expression: For cases that cannot be processed by above parameters, you can use free expression. For detailed information about supported math functions and operators，please refer to the Quick Help within the page. x represents the initial value reading from the register.

e.g.: Below is the format representing temperature in a communication protocol, TH-TL is the higher byte and lower byte respectively.

TH：

BIT7	*BIT6*	*BIT5*	*BIT4*	*BIT3*	*BIT2*	*BIT1*	*BIT0*
0	*0*	*1*	*0*	*F*	*T6*	*T5*	*T4*

TL：

BIT7	*BIT6*	*BIT5*	*BIT4*	*BIT3*	*BIT2*	*BIT1*	*BIT0*
T3	*T2*	*T1*	*T0*	*LT1*	*LT2*	*LT3*	*LT4*

TH – F (BIT3): sign bit, 1 means negative temperature, 0 means positive temperature.

BIT7→BIT4 in TH: reserved, always 0010.

BIT2 → BIT0 in TH: the higher 3 bits of temperature data, T6 (BIT2) is the highest bit.

BIT7 → BIT0 in TL: the lower 8 bits of temperature data, LT4 (BIT0) is the lowest bit.

The temperature resolution is 0.0625 ℃ (1/16 ℃).

*Apply free expression as (1-2*extract(x, 11, 1))*band(x, 2047)*0.0625*

(Initial value: TH=01 H, TL= 76 H, evaluated value is 23.375)

⑤ Customized poll time: Depending on how important the mapping is, you can set a customized repeat time for polling (smaller means faster). If set to zero, default poll rate will be used, which is set on the Modbus RTU Setup ->Local Device page.

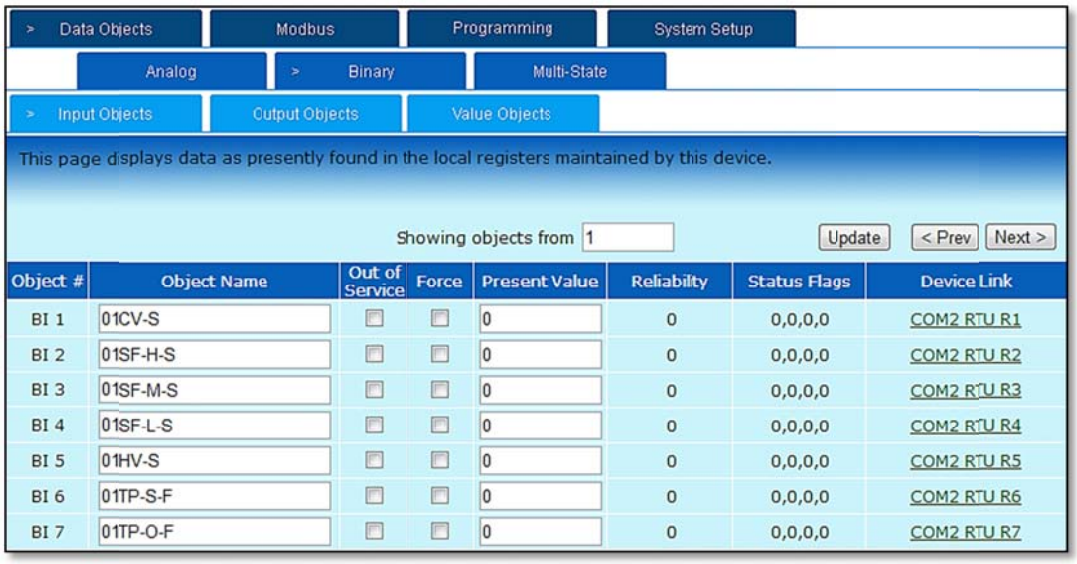
10. Examples of Data Formats:

Data Format	Description	Initial Data (Hexadecimal)	Present Value (Decimal)
Int16	16-bit, signed integer	FF00	-256
UInt16	16-bit, unsigned integer	FF00	65,280
Int32	32-bit, signed integer	FF00 1111	-16,772,847
UInt32	32-bit, unsigned integer	FF00 1111	4,278,194,449
Int64	64-bit, signed integer	FFFF FFFF FFFF 0000	-16
UInt64	64-bit, unsigned integer	0000 0001 0000 0000	4,294,967,296
Float32	32-bit, IEEE 754 single precision	615B 3F6C	0.9234
Float64	32-bit, IEEE 754 double precision	6B2F 7873 2CB9 F840	101266.78
Bit	0 or 1	1	1
York-Sp16	16-bit, Hi=Int, Lo=Dec	1905	25.5
BCD16	16-bit 8421 BCD code	1234	1,234
BCD32	32-bit 8421 BCD code	1234 5678	12,345,678

11. For detailed information about Mapping, please refer to the Quick Help within the page.

Troubleshooting

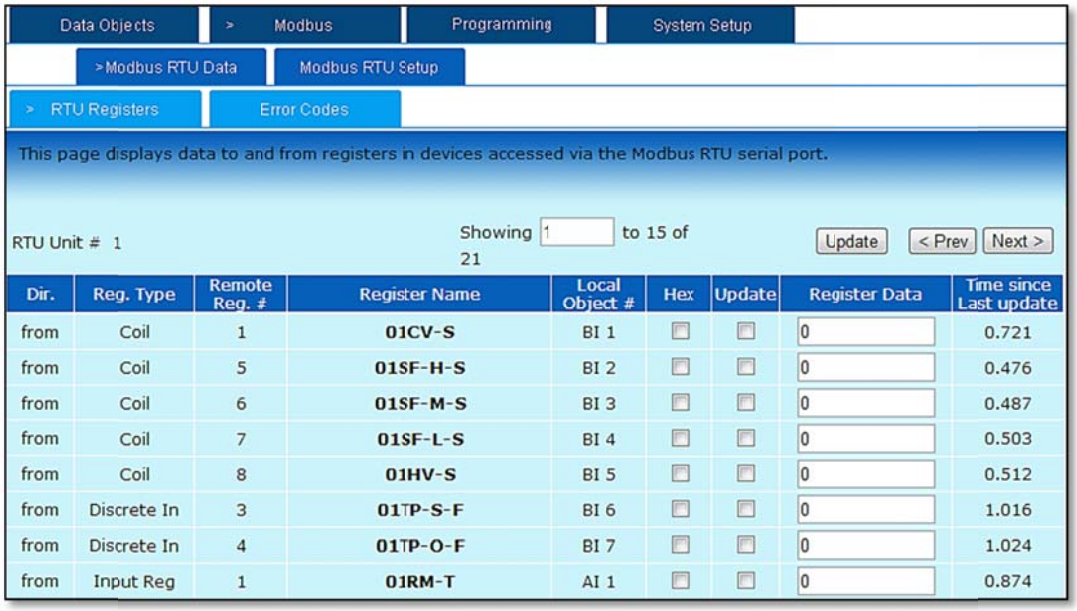
1. When Modbus Mappings done, connect a CSGW to actual Modbus devices.
2. To check the reliability and status flags(e.g.: BI): Data Object> Binary> Input Objects



Object #	Object Name	Out of Service	Force	Present Value	Reliabilty	Status Flags	Device Link
BI 1	01CV-S	☐	☐	0	0	0,0,0,0	COM2 RTU R1
BI 2	01SF-H-S	☐	☐	0	0	0,0,0,0	COM2 RTU R2
BI 3	01SF-M-S	☐	☐	0	0	0,0,0,0	COM2 RTU R3
BI 4	01SF-L-S	☐	☐	0	0	0,0,0,0	COM2 RTU R4
BI 5	01HV-S	☐	☐	0	0	0,0,0,0	COM2 RTU R5
BI 6	01TP-S-F	☐	☐	0	0	0,0,0,0	COM2 RTU R6
BI 7	01TP-O-F	☐	☐	0	0	0,0,0,0	COM2 RTU R7

Click the update button continuously. Reliability should be “0” and Status Flags “x, 0, 0, x” (value of x can be ignored). If not, please refer to the Quick Help within this page for more information.

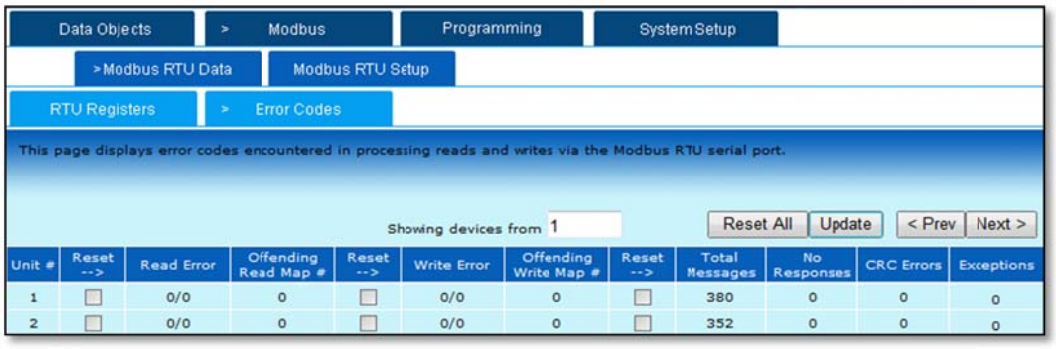
3. To check the time since last update(only for read map):
   Modbus> Modbus RTU Data> RTU Registers



Dir.	Reg. Type	Remote Reg. #	Register Name	Local Object #	Hex	Update	Register Data	Time since Last update
from	Coil	1	01CV-S	BI 1	☐	☐	0	0.721
from	Coil	5	01SF-H-S	BI 2	☐	☐	0	0.476
from	Coil	6	01SF-M-S	BI 3	☐	☐	0	0.487
from	Coil	7	01SF-L-S	BI 4	☐	☐	0	0.503
from	Coil	8	01HV-S	BI 5	☐	☐	0	0.512
from	Discrete In	3	01TP-S-F	BI 6	☐	☐	0	1.016
from	Discrete In	4	01TP-O-F	BI 7	☐	☐	0	1.024
from	Input Reg	1	01RM-T	AI 1	☐	☐	0	0.874

Click the update button continuously. The value of Time since Last update should change periodically. If not, please check the wiring and devices.

4. To check the error codes: Modbus> Modbus RTU Data> Error Codes.



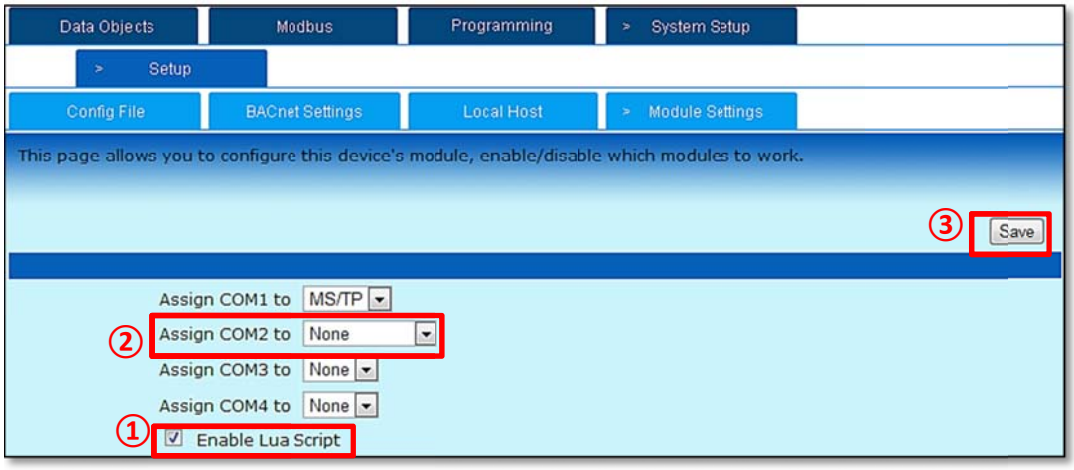
Unit #	Reset -->	Read Error	Offending Read Map #	Reset -->	Write Error	Offending Write Map #	Reset -->	Total Messages	No Responses	CRC Errors	Exceptions
1	☐	0/0	0	☐	0/0	0	☐	380	0	0	0
2	☐	0/0	0	☐	0/0	0	☐	352	0	0	0

Click the update button continuously. The value of Total Messages should be increasing, while value of No Responses, value of CRC Errors and value of Exception always show “0”. If not, please check Read/Write Error and refer to the Quick Help within the page for more information.

Lua Script Programming

1. Enable Lua Script[7] function:

   System Setup> Setup> Module Settings



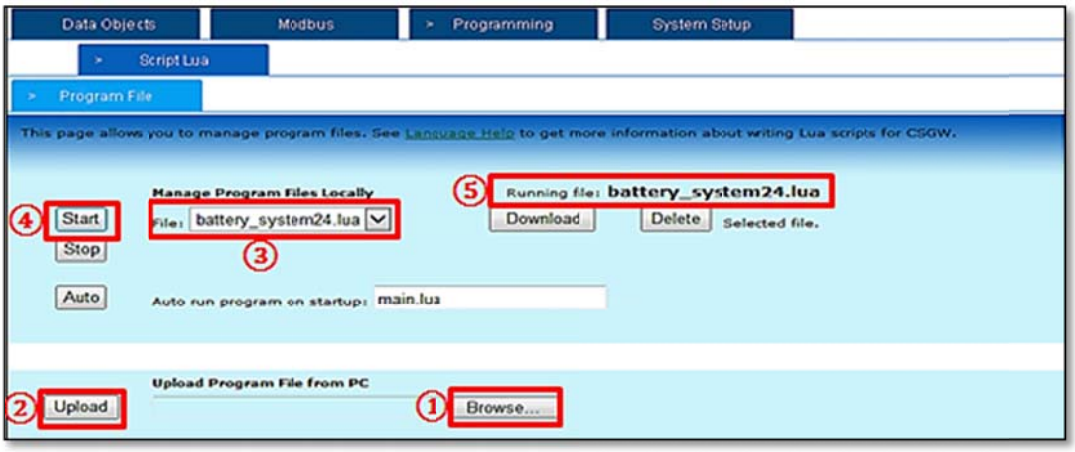
   To enable Lua Script function, do the followings:

   ① Check the box “Enable Lua Script”.

   ② Assign the COM (e.g.: COM2) to None (as vendor port, defined when developing script).

   ③ Click the save button in Module Settings page.

2. Upload and run Lua Scripts: Programming> Script Lua> Program File



   To upload a script, do the followings:

   ① Click the browse button, browse and select the script file.

   ② Click the upload button. The page (shown as figure below) will show to indicate the upload result.

[7] Lua Scripts can be developed according to real need. For more information of how to develop Lua scripts for CSGW, please refer to the built-in CSGW Language Help.

To run a script, do the followings:

③ Click on the drop-down list of “File” to select the script you just uploaded.

④ Click the button “Start” to run the file.

⑤ If it runs properly, the Running file field will show the current running script file name.

3. Back up and delete the script: Programming> Script Lua> Program File

To back up the script, do the followings:

① Click on the drop-down list of “File” to select the script you want to back up.

② Click the download button to back up.

To delete the script, do the followings:

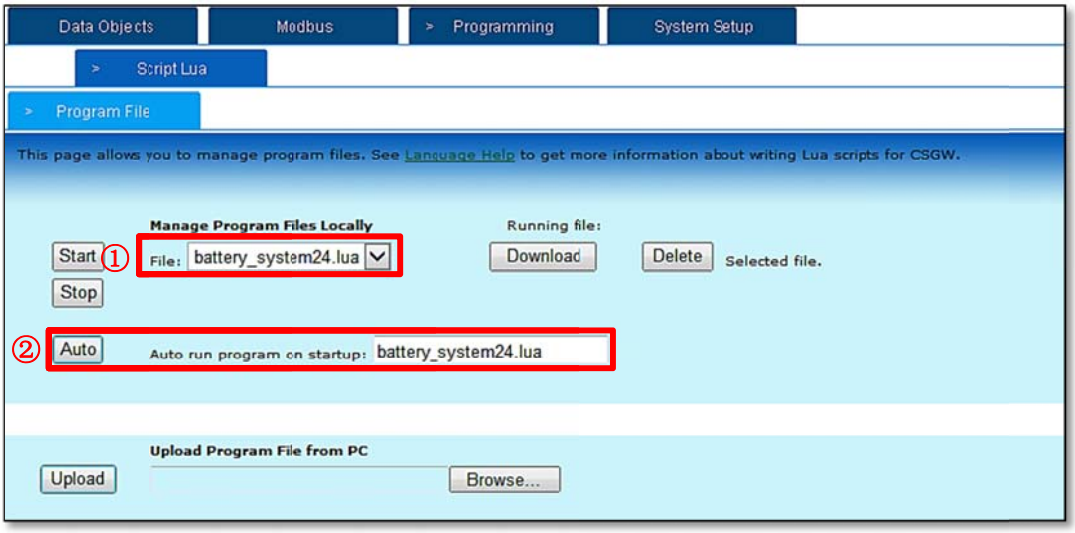
③ If the script is running, click the stop button to terminate it.

④ Click on the drop-down list of “File” to select the script.

⑤ Click the delete button.

4. To make the script run automatically at boot-up:

Programming > Script Lua > Program File



① Click on the drop-down list of “File” to select the script.

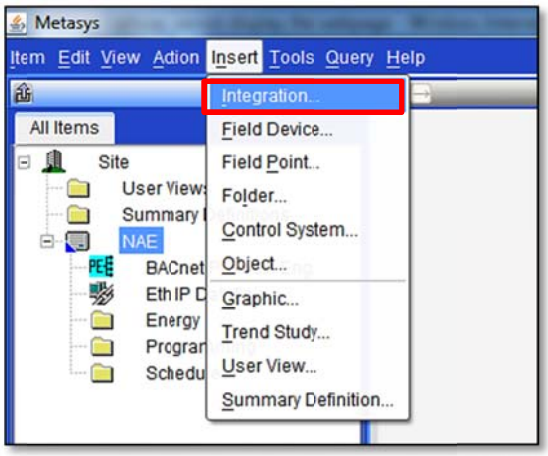
② Click the auto button to make name of the script displayed in the textbox.

③ Click the save button in Config File page.

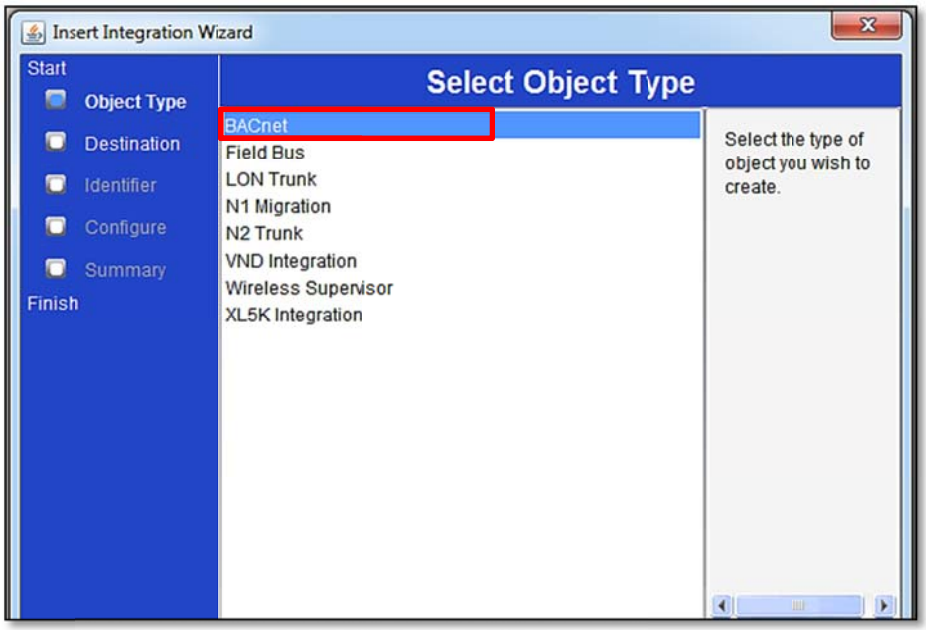
NAE/NCE Mappings

1. Mapping through IP trunk, do the followings:

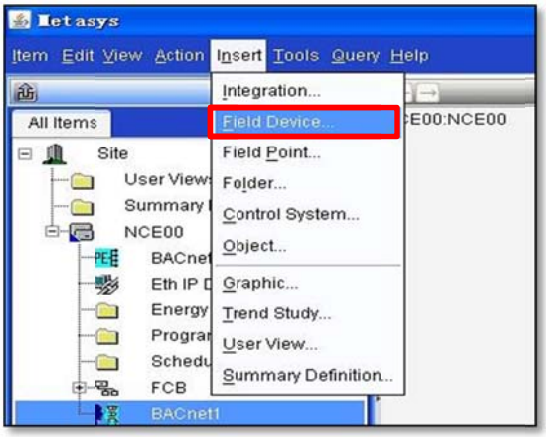
① Insert Integration.



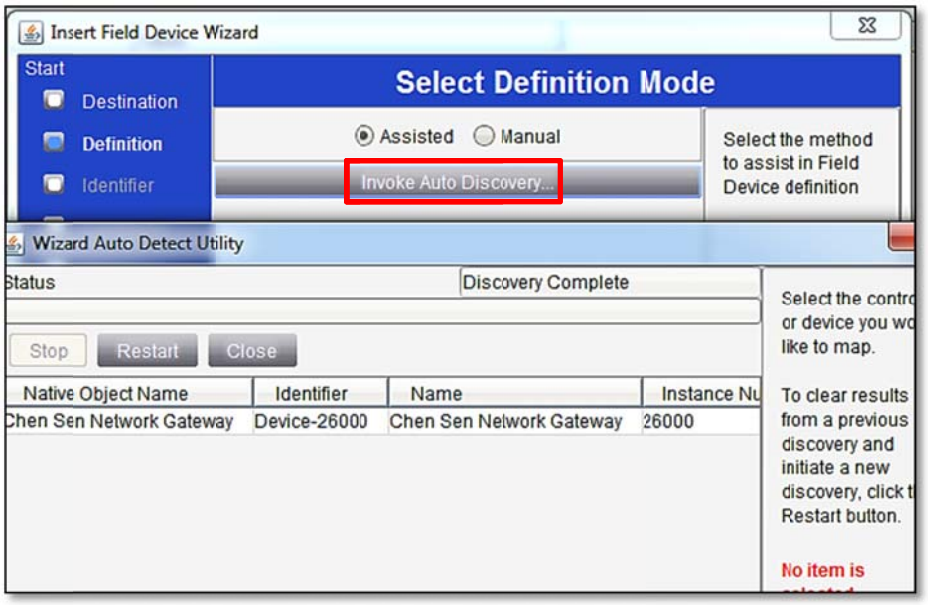
② Select Object Type: BACnet.



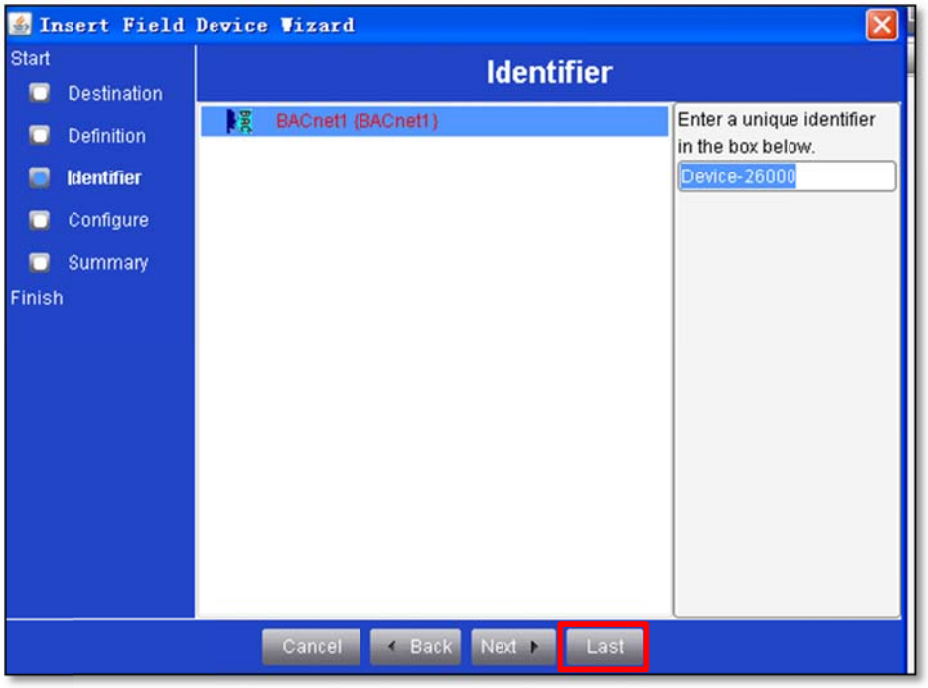
③ Insert Field Device.



④ Invoke Auto Discovery.

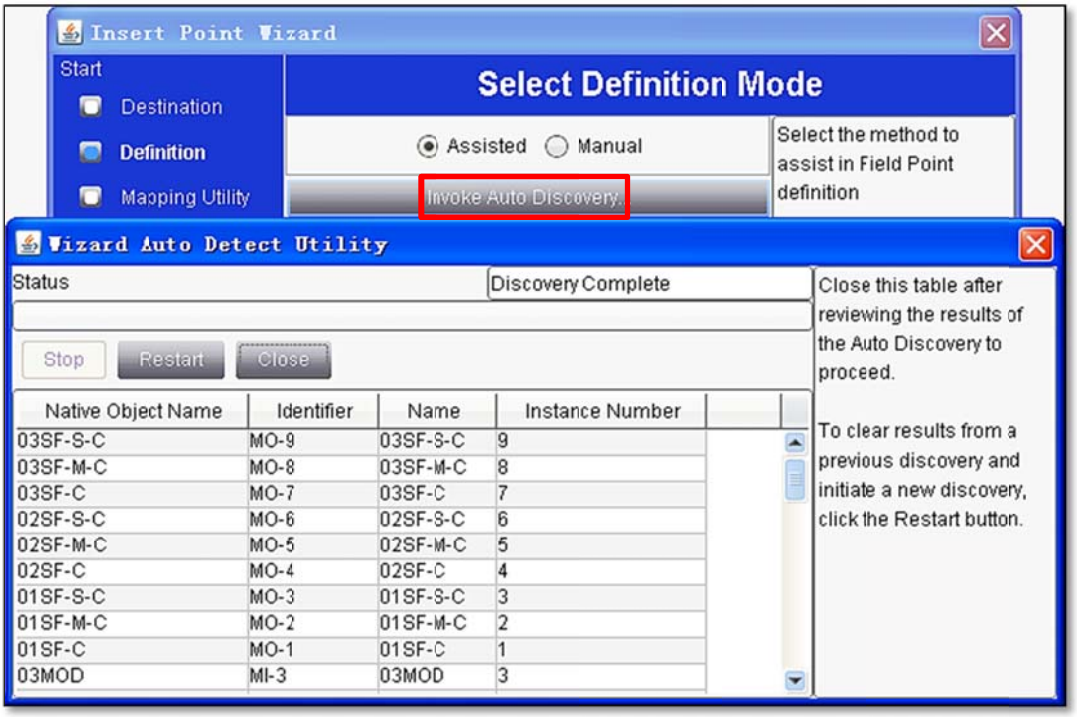


⑤ Select Chen Sen Network Gateway, and Last→ Finish→ Done.

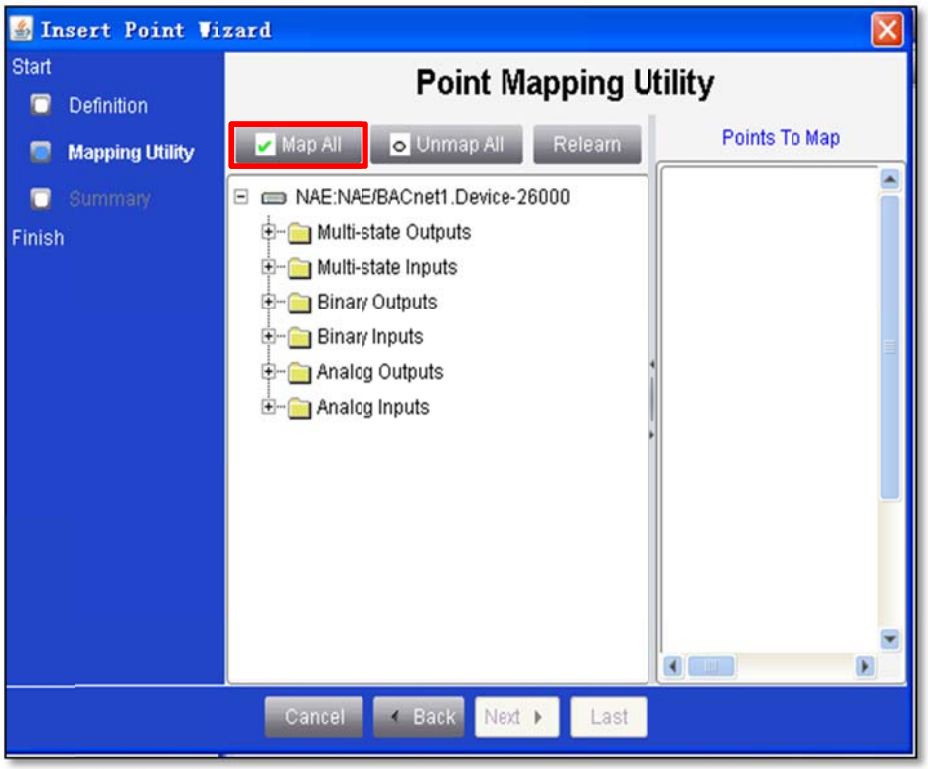


⑥ Inset Field Points.

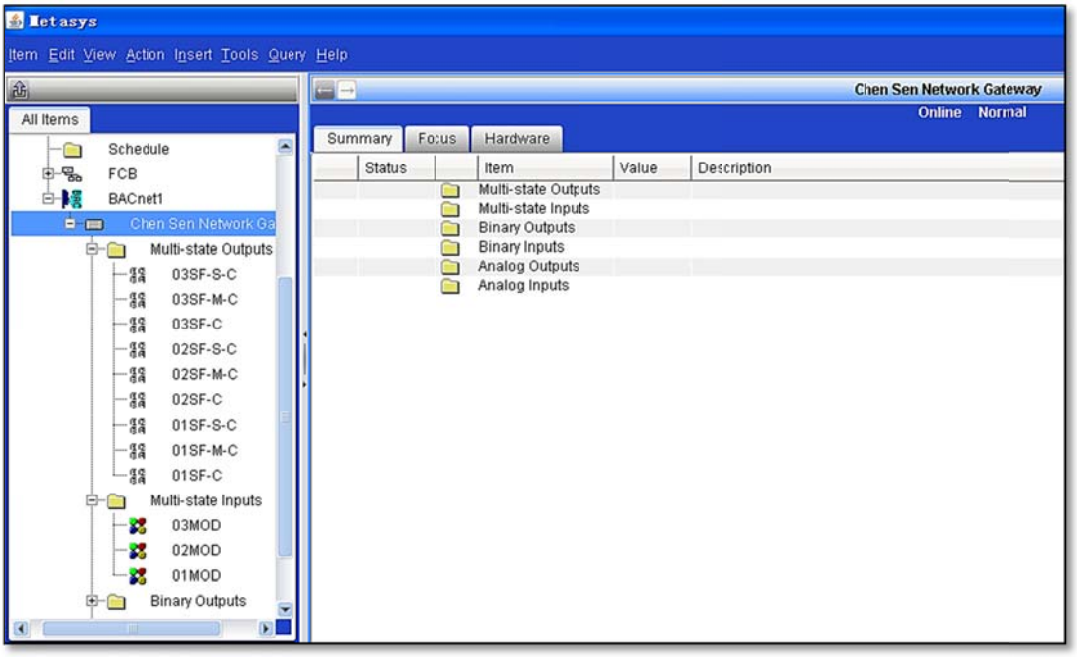
⑦ Invoke Auto Discovery.



⑧ Map All Points.



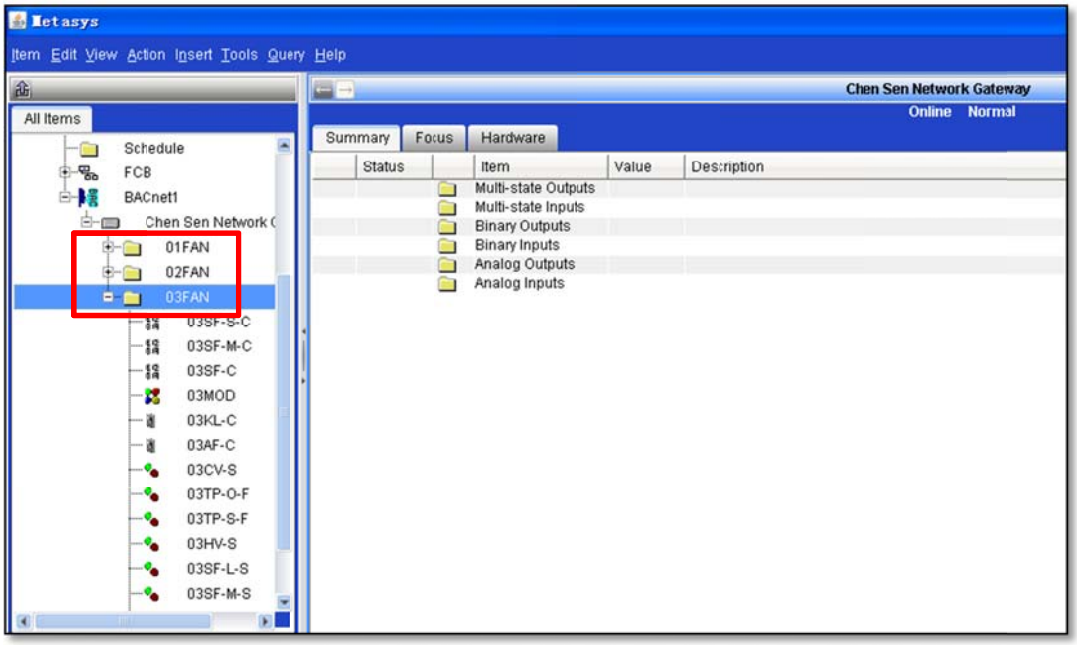
⑨ Now BACnet objects created in CSGW are listed in NAE/NCE.



NOTE:

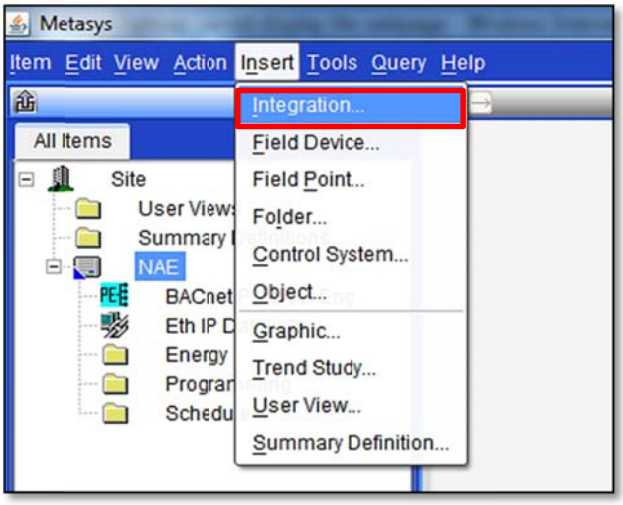
<1> You can change names of devices and units of points.

<2> You can create folders before mapping points when devices inserted (shown as figure below). It is recommended to place points into different folders if there're a large number of points mapped.

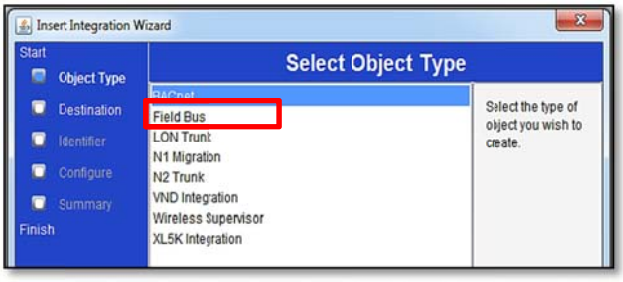


2. Mapping through MS/TP trunk[8], do the followings:

① Insert Integration.



② Select Object Type: Field Bus.



③ Please refer to Part 1.

NOTE:

If the supervisor device is NCE, you can add device directly under the FCB trunk with no need for adding Integration and Field Bus.

[8] Mapping through MS/TP trunk does not apply to CSGW-4.